Port Alberni Generation Project
Major Capital Project Plan

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1.0 OBJECTIVES OF THE PROJECT

1.1 The Project Objective

The project under consideration in this Major Project Capital Plan is the development and construction of a gas fired electrical generation facility in Port Alberni. The project is being implemented to meet domestic electricity needs. The Port Alberni Generating facility will increase BC Hydro's installed generating capacity by approximately 260 MW and will produce additional energy of about 2100 GWh per year. BC Hydro plans to develop and own the project jointly with an experienced developer and operator.

1.2 Background and status

BC Hydro's January 2000 Integrated Electricity Plan Update identifies the Port Alberni Generation Project as a committed resource scheduled to be in service in 2003. This is based upon BC Hydro's analysis of several long-term options for supply to Vancouver Island (VI). That analysis has identified a preferred alternative, namely the construction of the Georgia Strait Crossing (GSX) gas pipeline and new natural gas-fired combined cycle gas turbines (CCGTs) on Vancouver Island. In addition to addressing demand on VI, which is projected to grow at a rate of 1.8 per cent per annum, the plant will replace electricity currently delivered to VI via submarine cables. Some of the cables will be decommissioned between now and 2007 coincident with their end of useful life.

BC Hydro and its development partner, Calpine Canada Power Holdings Ltd. of Calary have negotiated an Interim Agreement that sets out the key principles for the joint development, construction, ownership and operation of a 260 MW electrical generation facility in Port Alberni. BC Hydro will buy the total output from the plant under an Electricity Purchase Agreement for a period of 25 years. Final agreements will be negotiated during the early part of 2001.

2.0 COSTS AND BENEFITS OF THE PROJECT

2.1 Costs

Total project capital costs, including contingencies, are estimated at $338 million with joint development costs representing up to $275 million of this total and the balance being certain project related costs and contingencies under BC Hydro's direct control and cost responsibility, including land procurement, and gas and transmission interconnection. BC Hydro's share of total capital costs including contingencies is approximately $180 million.

2.2 Benefits

The electrical benefits of the project are the annual expected generation of approximately 2100 GWh of energy and the availability of up to approximately 260 MW of peak capacity at a largely fixed cost available to meet domestic load requirements.

In addition to the direct energy provided by the project, there are direct construction employment benefits and offset employment and economic benefits through the Strategic Partnering Agreement with GE Canada. The project is expected to generate 240 person-years direct construction employment, twenty permanent operating jobs plus $20 million in industrial offsets under the Strategic Partnering Agreement with GE Canada and will use local suppliers wherever practical.

3.0 RISKS ASSOCIATED WITH THE COSTS AND BENEFITS

3.1 Risks Associated with Costs

BCH has structured the project to mitigate significant risks including the major elements of development and operating risks.

Partnering with an experienced joint venture partner, will help mitigate risks associated with development and operation. In particular, Calpine's expertise in CCGT equipment procurement, project planning, construction and operations, complements BC Hydro's knowledge and experience with developing and operating electric generation facilities in British Columbia.

The sharing of the costs and expertise, with all significant project decisions to be made jointly, services to limit BC Hydro's exposure to cost overruns and other development and operating risks. A detailed project management plan is under development, that covers an implementation schedule and standards for project reporting and control, to further mitigate risks.

The Port Alberni Generation Project and the Georgia Strait Crossing (GSX) gas pipeline project schedules are linked as GSX provides the pipeline infrastructure necessary to bring natural gas destined for the Port Alberni generating facility from the mainland to

Vancouver Island. Both projects have distinct regulatory approval and construction schedules. Both projects' in service dates and project schedules are being coordinated to ensure economic optimization.

3.2 Risks Associated with Benefits

The project benefits are associated with the amount of energy generated in any year and minimizing the cost of the energy.

Operations Risk

Operations risk will be minimized by relying on proven technology under an experienced operator. The joint venture plans to initially retain Calpine, who have extensive operating experience with CCGT's, to operate the plant. Thereafter, plant operation will be a joint responsibility. The plant is dispatchable by BC Hydro and a heat rate bonus / penalty is included in the energy purchase agreement as incentive for efficient operation.

Market Risk (Natural Gas and Electricity Price Risks)

Port Alberni generation is being built to serve domestic load on Vancouver Island. Consequently, BC Hydro has chosen to structure the Energy Purchase Agreement covering the Port Alberni Generation Project as a fixed tariff tolling plant. As a tolling plant, BC Hydro will be responsible for assuming gas supply delivery to the facility and paying a fixed rate to convert gas into electricity. This approach is considered the optimal approach to managing market price risks of fuel supply and electricity output and providing lowest possible cost, energy to Vancouver Island.

Natural gas fuel and domestic electricity price risk management related to Port Alberni will be incorporated into BC Hydro's supply and demand portfolio upon which existing commodity risk management policies and practices apply.